

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	I	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,293	10/687,293 10/16/2003		Keith E. Grzywacz	TFM0058	7533
832	7590	03/14/2006		EXAMINER	
BAKER &			TAMAI, KARL I		
111 E. WAY SUITE 800	'NE STR	EET	ART UNIT	PAPER NUMBER	
FORT WAY	NE, IN	46802	2834		
				DATE MAILED: 03/14/2006 💮	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Δ	د.
_	7	Г

	Application No.	Applicant(s)					
	10/687,293	GRZYWACZ ET AL.					
Office Action Summary	Examiner	Art Unit					
	Tamai I.E. Karl	2834					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be timil apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	I.  lely filed  the mailing date of this communication.  D (35 U.S.C. § 133).					
Status							
1)⊠ Responsive to communication(s) filed on 09 Ja	nuary 2006.						
·	action is non-final.						
3) Since this application is in condition for allowan							
closed in accordance with the practice under E.	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.					
Disposition of Claims							
4) Claim(s) <u>1-26</u> is/are pending in the application.	☑ Claim(s) <u>1-26</u> is/are pending in the application.						
4a) Of the above claim(s) 22-26 is/are withdraw	4a) Of the above claim(s) <u>22-26</u> is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>21</u> is/are allowed.	•						
6)⊠ Claim(s) <u>1-20</u> is/are rejected.	· · · —						
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or	election requirement.						
Application Papers							
9)☐ The specification is objected to by the Examiner	•						
10)⊠ The drawing(s) filed on <u>09 January 2006</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.							
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
·	11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119							
•	priority under 25 U.S.C. & 110(a)	(d) or (f)					
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	-(a) or (i).					
a) All b) Some * c) None of:	have been received						
	1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents	·						
3. Copies of the certified copies of the prior		ed in this National Stage					
application from the International Bureau	,						
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date							
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  5) Notice of Informal Patent Application (PTO-152)							
Paper No(s)/Mail Date 6) Other:							

Art Unit: 2834

### **DETAILED ACTION**

#### Election/Restrictions

1. This application contains claims 22-26 drawn to an invention nonelected with traverse in Paper No. 6/29/2005. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

### **Drawings**

- 2. The drawings were received on 1/9/2006. These drawings are accepted.
- 3. The objection to the drawings under 37 CFR 1.84(p)(5) regarding reference number 140 is withdrawn.
- 4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the resilient fingers and the wall extending from the cover must be shown or the feature canceled from claims. No new matter should be entered.

## Claim Rejections - 35 USC § 102

5. The 35 USC 102(b) rejections over Kidokoro and Sugiyama are withdrawn.

Art Unit: 2834

## Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 8. Claims 1, 5, 6, 7, and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kidokoro (JP 07-274443), in further view of the Applicant's Admitted Prior Art (AAPA).

Kidokoro teaches a motor with a hall sensor 37 and magnet 29, and a cover 30. The cover having a first finger 38 received in a recess 23b of the endshield. The endframe having wall around the exterior surface of the cover 30. The stop 38 and the wall of the endshield prevents the cover from being disengaged from the endshield.

Kidokoro teaches every aspect of the invention except an opening of the cover and a drive shaft/pin extending through the cover, magnet, and end frame. AAPA teaches an opening in the cover, magnet, endframe, and armature shaft for a drive pin. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the motor of Kidokoro with the opening in the cover to permit passage of the drive shaft as taught in the AAPA.

9. Claims 1-3, 6, 7, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (JP 06-105521), in further view of the Applicant's Admitted Prior Art (AAPA).

Sugiyama teaches a motor with a hall sensor 16 and magnet receiver 12 holding magnet 13, and a cover secured to the endshield by at least on finger (see figure 1), where the finger includes a protrusion/stop to prevent disengagement of the housing and engage the endshield in a snapfit manner. The endshield, armature and magnet receiver having holes axially aligned.

Sugiyama teaches every aspect of the invention except an opening of the cover and a drive shaft/pin extending through the cover, magnet, and end frame. AAPA teaches an opening in the cover, magnet, endframe, and armature shaft for a drive pin. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the motor of Sugiyama with the opening in the cover to permit passage of the drive shaft as taught in the AAPA.

Art Unit: 2834

10. Claims 4 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kidokoro (JP 07-274443) and AAPA, in further view of the Ozuru (JP 6-284641). Kidokoro teaches fingers on the cover but does not teach the fingers extending from the endshield fingers and a recess on the cover. Ozuru shows protrusions extending from the endshield to mate with a recess 10 on the cover to provide easy assembly. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the motor of Kidokoro and AAPA with the fingers on the endshield because Ozuru teaches the mating protrusion extending from the endshield to provide easy assembly and because a mere reversal of essential working parts involves only routine skill in the art (See In re Einstein, 8 USPQ 167).

11. Claims 8-12, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kidokoro (JP 07-274443), in further view of the Ozuru (JP 6-284641).

Kidokoro teaches a motor with a hall sensor 37 and magnet 29, and a cover 30. The cover having a first finger 38 received in a recess 23b of the endshield. The endframe having wall around the exterior surface of the cover 30. The stop 38 and the wall of the endshield prevents the cover from being disengaged from the endshield. Kidokoro fingers the cover but does not teach the fingers extending from the endshield fingers and a recess on the cover. Ozuru shows protrusions extending from the endshield to mate with a recess 10 on the cover to provide easy assembly. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the motor of Kidokoro with the fingers on the endshield because Ozuru teaches the mating protrusion extending from the endshield to provide easy assembly

Art Unit: 2834

and because a mere reversal of essential working parts involves only routine skill in the art (See *In re Einstein*, 8 USPQ 167).

- 12. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kidokoro (JP 07-274443) and Ozuru, in further view of the Applicant's Admitted Prior Art (AAPA). Kidokoro and Ozuru teach every aspect of the invention except an opening of the cover and a drive shaft/pin extending through the cover, magnet, and end frame. AAPA teaches an opening in the cover, magnet, endframe, and armature shaft for a drive pin. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the motor of Kidokoro and Ozuru with the opening in the cover to permit passage of the drive shaft as taught in the AAPA.
- 13. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kidokoro (JP 07-274443) and Ozuru (JP 6-284641), in further view of the Michaels et al. (Michaels)(US 5877572). Kidokoro and Ozuru teach every aspect of the invention except the plurality of walls proximate the fingers. Michaels teaches the wall on the ends shield comprised of a plurality of walls surrounding the cover 30, sensors, and plugs. It is inherent that the wall is proximate the mating projections and recesses (col. 5, line 2) to secure the cover to the endshield 12b. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the motor of Kidokoro and Ozuru with the plurality of walls to prevent dust from entering the motor, as taught by Michaels.

Art Unit: 2834

## Allowable Subject Matter

14. Claim 21 is allowed.

## Response to Arguments

15. Applicant's arguments filed 1/9/2006 have been fully considered but they are not persuasive. Applicant's argument regarding a hole in the cover of Kidokoro is not persuasive. The Applicant's admitted prior art clearly motivates the use of a pin or flexible cable (paragraph 0005) can be inserted through a hole in the cover aligned with the armature to drive power adjustable seats (paragraph 0002). Applicant's argument that the hole would destroy the sealed housing purpose of Kidokoro and Sugiyama is not persuasive. Kidokoro the mounting provides a strong, small and flat arrangement for the motor and sensor (see translation paragraph 006), where this stated purposes is provided when the flexible coupling or pin of the Applicant's admitted prior art is extended through the cover. Applicant's argument regarding Sugiyama the sealing of Sugiyama is not persuasive because Sugiyama is silent regarding any seals.

Applicant's arguments are not persuasive because the prior art in the motor art supports the shaft extending through the position sensors and cover, see Nakanura US 5235228 and Blaser US 5272402, or openings in the cover of Rodi et al. (US 4759218).

#### Conclusion

16. Applicant's amendment necessitated the new ground of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl I.E. Tamai whose telephone number is (571) 272 - 2036. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Darren Schuberg, can be reached at (571) 272 - 2044.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Karl I Tamai PRIMARY PATENT EXAMINER March 9, 2006

Business Center (EBC) at 866-217-9197 (toll-free).

KARL TAMAI PRIMARY EXAMINER